

Abstract of the Disclosure

Laser beam machining is applied to form arbitrarily shaped electroactive ceramics for transducers (*e.g.*, electromechanical sensors and actuators). One particularly preferred embodiment of the invention comprises machining parallel grooves in a ceramic plate to improve flexibility. The grooves provide strain relief in bending by relieving Poisson strains transverse to the direction of bending. This embodiment offers the further benefit that planar anisotropy or directionality is introduced in the transducer. The machining process of the invention further enables the production of more complex geometries than those currently known in the art. Because of the flexibility of the machining process, virtually any desired transducer shape may be produced.

DS1.459185.2

20041919-010302